



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,808	05/26/2000	Muhammed Ibrahim Sezan	KLR:7146.085	9106
55648 7590 10/05/2007 KEVIN L. RUSSELL CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP 1600 ODS TOWER 601 SW SECOND AVENUE PORTLAND, OR 97204			EXAMINER SHANG, ANNAN Q	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 10/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/580,808

Applicant(s)

SEZAN ET AL.

Examiner

Annan Q. Shang

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-26,28-79,89-104 and 108-118 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-26,28-79,89-104 and 108-118 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. With respect to claims 61-70, 72, rejected under 35 U.S.C. 102(e) as being anticipated by **Maissel et al (6,637,029)**, Applicant's arguments filed 06/25/07 have been fully considered but they are not persuasive. Applicant argues that the STB disclose in Maissel is not a recording devices and hence cannot record the video (see page 18+ of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's arguments, however, Applicant's arguments are directed to specific units. Maissel teaches that the apparatus of fig.1 comprises an interface unit 110, VCR, DVCR, DVD, etc. (col.10, line 22-62). Hence the Apparatus (110/100/120/130/140/VCR, DVCR, DVD, etc coupled to each other) is a recording apparatus and meets all the claim limitations. Hence the rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to claim Claims 71, 108-118, rejected under 35 U.S.C. 103(a) as being unpatentable over **Maissel et al (6,637,029)** in view of **Herrington et al (6,865,746)**, applicant discusses the prior arts of record individual and further argues that the combination is not proper (see page 19, of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's arguments, however as to claim 71 which depends on claim 61, Examiner, maintains the rejection is proper and meets all the claim limitations

As to claims 108-118, applicant's arguments are not persuasive, Maissel meets all the claim limitation, but silent to preference description describing the creation date

Art Unit: 2623

of at least one of audio and video. However, **Herrington** discloses a system for providing user preference to TV programs where the preferences description with respect to various programs including, sports, episodes of the program (figs.3-7, col.5, lines 50-61 and col.7, line 7-12) and further discloses providing user preference to TV programs where the preferences description describes the production year of program, and its used to select a desired number of episodes among a plurality of episodes of the program (figs.3-7, col.6, line 17-38, col.7, line 38-53 and col.10, line 15-28). Hence the combination is proper, meets all the claim limitations and maintained as repeated below.

With respect to claims 73-79, rejected under 35 U.S.C. 103(a) as being unpatentable over **Maissel et al (6,637,029** in view of **O'Brien et al (6,055,569)**, applicant further discusses the individual references and argues that the combining reference do not meet the claim limitations (see page 20+ of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's arguments, however, Maissel teaches all the claim limitations as discussed in the office action, but silent to providing a layer attribute of the preferences description indicating the number of layers of supplemental data auxiliary to the at least one of the audio and video. However, this deficiency in Maissel is disclosed in O'Brien, which provides preferences as to the number of layers of supplemental data to download to a user after predicting the user's action (col.3, line 29-col.4, line 29 and line 52-col.5, line 8). Hence combining the references is proper and would be within the knowledge of one skill in the art. The rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to claims 89-93, rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)**, and further in view of **O'Brien et al (6,055,569)**, applicant further presents similar arguments, that that combining reference do not meet the claim limitations (see page 25+ of Applicant Remarks).

In response, Examiner disagrees. Examiner notes applicant's argues, however for the same reasons discussed with respect to the rejection of 73, combining the references is proper and would be within the knowledge of one skill in the art. The rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to claims 94-103, rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Osawa et al (5,956,037)**, applicant further presents similar arguments that that combining reference do not meet the claim limitations (see page 24+ of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's argues, however for the same reasons discussed with respect to the rejection of 73, combining the references is proper and would be within the knowledge of one skill in the art. The rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to claims 38-46, rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)**, applicant further presents similar arguments that that combining references do not meet the claim limitations (see page 23+ of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's argues, however as clearly discussed in the office action, Sahai teaches all the claim limitations, however, the deficiency in Sahai is disclosed in Vetro and combining the references is proper and would be within the knowledge of one skill in the art. The rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to claims 49-54 and 56, rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)**, applicant further presents similar arguments that that combining references do not meet the claim limitations (see page 23+ of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's argues, however as clearly discussed in the office action, Sahai teaches all the claim limitations, however, the deficiency in Sahai is disclosed in Vetro and combining the references is proper and would be within the knowledge of one skill in the art. The rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to claims 57-60, rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)**, applicant further presents similar arguments that that combining references do not meet the claim limitations (see page 23+ of Applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's argues, however as clearly discussed in the office action, Sahai teaches all the claim limitations, however, the deficiency in Sahai is disclosed in Vetro and combining the references is

Art Unit: 2623

proper and would be within the knowledge of one skill in the art. The rejection is proper, meets all the claim limitations and maintained as repeated below.

With respect to independent claims 2, 21 and 31, and their dependent claims, amendment to the claims necessitated the new ground(s) of rejection. **This office action is made final.**

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 61-70, 72 are rejected under 35 U.S.C. 102(e) as being anticipated by **Maissel et al (6,637,029)**.

As to claims 61, note the **Maissel** reference figures 1-3, discloses a subscriber unit for receiving a program schedule, a profile storage unit for storing at least viewer preference, etc., and further discloses a storage medium selectively detachably insertable into a recording device (Apparatus-1 comprising: 110/100/120/130/140/VCR, DVCR, DVD, etc coupled to each other) suitable to record at least one of audio and

video comprising a plurality of frames, the storage medium (Apparatus 160) storing information comprising:

A preferences description, describing preferences of a user with respect to the use of said at least one of audio and video, where the description includes multiple attributes (figs.1-2, col.12, line 16-col.14, line 53); and a time attribute of preferences description describing at least one of: a first time to start obtaining the at least one of audio and video prior to the scheduled time of the at least one of audio and video; and a second time to end obtaining the at least one of audio and video after the schedule time of the at least one of audio and video (col.12, line 16-col.14, line 53); and

where the storage medium (160, Diskette or Smart Card, col.14, line 54-col.15, line 16) interacts with the recording device Unit 110, fig.1, col.10, line 22-62) when inserted in the storage medium to obtain the at least one of an audio and a video (col.19, line 1-15 and col.20, line 7-17, line 60-col.21, line 1+).

As to claim 62-66, Maissel further discloses where the scheduled time is the time period of at least one of audio program and video program, where the first time is selected based upon the content of at least one of audio program and a video program, where the second time is selected based upon the content of the at least one of audio and a video program and where the content is described in the preferences description (col.12, line 16-col.13, line 1+, col.19, line 1-19, col.20, line 7-17, line 45-col.21, line 3 and line 30+).

Claims 67-70 are met as previously discussed with respect to claims 62-66.

As to claim 72, Maissel further disclose where the type includes sitcoms (col.11, line 30-37 and col.20, line 45-59).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 71, 108-118 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maissel et al (6,637,029** in view of **Herrington et al (6,865,746)**.

As to claim 71, Maissel teaches all the claimed limitations as previously discussed with respect to claim 68 above, but fails to teaches where the type of programs includes sports programs.

However, note the **Herrington** reference figures 1-2, discloses a system for providing user preference to TV programs where the preferences description with respect to various programs including, sports, episodes of the program (figs.3-7, col.5, lines 50-61 and col.7, line 7-12).

Therefore it would have been obvious to one of ordinary skilled in the art at the time of the invention to incorporate the teaching of Herrington into the system of Maissel to provide user preferences to specific types of programs, such as sports, episodes, etc., to meet the user desire.

As to claims 108-118, note the **Maissel** reference figures 1-3, discloses a subscriber unit for receiving a program schedule, a profile storage unit for storing at least viewer preference, etc., and further discloses a method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

Providing a preferences description, on a storage medium detachably insertable (160, Diskette or Smart Card, col.14, line 54-col.15, line 16) into a multimedia device (Unit 110, fig.1, col.10, line 22-62), the preferences description describing preferences of a user with respect to the use of the at least one of audio and video, where the description includes multiple attributes (col.12, line 16-col.14, line 53).

Maissel provides customizes schedule based on a user preferences which includes starting/ending date, starting/ending time, etc., and where the select programs are recorded in the local storage 110 (col.11, lines 7-37 and col.14, lines 10-19), but silent to providing a creation attribute of the preferences with respect to the creation date of at least one of audio and video, where the date refers to the original creation date of at least one of audio video, where the creation date refers to the re-mastering date of the at least one of audio and video programs and where the creation date is used to select among a plurality of at least one audio and video programs.

However, note the **Herrington** reference figures 1-2, discloses a system for providing user preference to TV programs where the preferences description describes the production year of program, and its used to select a desired number of episodes among a plurality of episodes of the program (figs.3-7, col.6, line 17-38, col.7, line 38-53 and col.10, line 15-28).

Therefore it would have been obvious to one of ordinary skilled in the art at the time of the invention to incorporate the teaching of Herrington into the system of Maissel to provide the user preferences to enable the user to select past program(s) of episodes or movies for viewing or recording accordingly.

6. Claims 73-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maissel et al (6,637,029** in view of **O'Brien et al (6,055,569)**.

As to claims 73-79, **Maissel** reference figures 1-3, discloses a subscriber unit for receiving a program schedule, a profile storage unit for storing at least viewer preference, etc., and further discloses a method of using a system with at least one of an audio and a video comprising a plurality of frames comprising:

Detachably inserting a storage medium (160, Diskette or Smart Card, col.14, line 54-col.15, line 16) into a multimedia device (Unit 110, fig.1, col.10, line 22-62), the storage medium storing a preferences description describing preferences of a user with respect to the use of the at least one of audio and video, where the description includes multiple attributes (col.12, line 16-col.14, line 53).

Maissel provides customizes schedule and additional data or supplemental data relating the a subject matter of a particular program and downloads additional data via WWW site on the Internet (col.15, lines 23-37 and col.21, lines 22-47), but fails to teach providing a layer attribute of the preferences description indicating the number of layers of supplemental data auxiliary to the at least one of the audio and video.

However, **O'Brien** discloses in figures 1-3, accelerating web access by predicting a user action which determines which pages to download based of a probability weight to provide a layer attribute of the preferences description indicating the number of layers of supplemental data to download (col.3, line 29-col.4, line 29 and line 52-col.5, line 8)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of O'Brien into the system of Maissel in order to determine in advance the number of links or web pages or set limits on the number of links or web pages that would be needed to reduce the size or data file to be retrieve to free up network bandwidth and further increase the data retrieval speed at the server and also client terminal.

7. Claims 2, 3, 5-9, 12-19, 21-25, 27-29, 38-46, 48-54, 56 and 104, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)**

As to claims 2-3, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication

Art Unit: 2623

Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31);

Server 10, stores each Client 12 capabilities and preferences and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media "audio and video" and the client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server, processes and delivered accordingly based on the selected preferences/specifications.

Sahai fails to explicitly teach where the selected qualities are based on semantic content of at least one of audio and video, and where each of the first and second qualities is respectively associated with at least one type of semantic content of at least one of the audio, image and video.

However, note the **Vetro** reference figures 1-3, discloses multimedia delivering a compressed bitstream through a network to a user device, where a Content-network Device (CND) Manager selects a particular one of a plurality of conversion modes depending on semantic content of the bitstream and network characteristics, using different rating to transcode the bitstream with respect to words, sounds, image objects, scenes, etc., (col.4, lines 15-65, col.5, line 20-col.6, line 6 and line 38-col.7, line 10).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Vetro into the system of Sahai in order to dynamically enhanced the respective segments of the video with different qualities or rate with dynamic scene changes and associated each change with a type of semantic content to provide the user with the best delivery of scene changes or semantic content of the video or bitstream based on user preferences.

As to claims 5-6, Sahai further teaches a first quality and second quality of encoding where the first is less than the second (col. 3, lines 50-60 and col. 4, lines 17-31), note that Server 10 can encode in MPEG1, MPEG2, MJPEG, etc., depending on Client 12 C/P, where one encoding scheme is less than the other and further where the storage results in at least storing less bytes of the first quality encoding of the audio video than the second quality of encoding using digital compression technique (col. 6, lines 12-49).

As to claims 7 and 8, Sahai further discloses selecting the quality of encoding base upon the storage for at least the audio and video and automatically performed by the Server 10 (col. 3, lines 23-31, lines 50-60 and col. 4, lines 17-40).

As to claim 9, Sahai further discloses where the selecting is prompted to the user of the system for selection (col. 5, lines 17-31).

As to claims 12-13, Sahai as modified by Vetro further discloses selecting either the first quality and the second quality based upon the type of content, audio, video clip, video, audio/video, etc., (multimedia streaming) and uses various formats (MPEG1, MPEG2, etc.,) for encoding based on the content and transport mechanism where the Server dynamically adjusts the bit rate before delivering the asset to the client (col. 5, lines 35-46, col. 6, lines 12-49 and line 57-col.7, line 36), but silent to encoding quality for specific type of content, such as sports programming, nature programming, etc.,

However, it would have been obvious to one of ordinary skilled artisan to modified the system of Sahai as modified by Vetro to provide the client with additional selection preferences of encoding type for any type of content that meets the user's desire.

As to claims 14-15, further discloses a method where the system automatically selects first and second quality based upon attributes of preferences description, system description, a program preferences description, predefined relationships between a plurality of attributes of the preference descriptions, a program preference descriptions, system preference descriptions (col. 3, lines 23-60, col. 4, lines 9-40 and col.6, line 57-col.7, line 9), note that Server 10 upon receiving the various play request and Client C/P automatically, makes flexible and accurate decisions about the Client concerning resource allocation for streaming of data and the use of appropriate format type (MPEG1, MPEG2, etc.,) and network traffic to stream media data according to C/P

As to claim 16, Sahai as modified by Vetro fail to explicitly teach where the semantic content comprises at least one of actors, stars, director and rating.

However, Examiner takes OFFICIAL NOTICE that actors, stars, etc., are well know features in video streaming or television. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Sahai as modified by Vetro to include actors, stars, etc., for the advantage of enhancing the audio/video with favorite actors, stars, etc., that meets a user's desire or preferences.

Claims 17-19 are met as previously discussed with respect to claims 14-15.

As to claim 21, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose a system for use with at least one of broadcast of audio and video comprising a plurality of frames comprising:

the claimed "system for receiving said broadcast of at least one of audio and video..." is met by Server 10 (fig. 1, col. 2, lines 44-64), note that Server 10 receives broadcast of audio and video from various servers on the network 14 and stores the received audio and video data, in a storage media, such as a disk (col. 6, lines 50-52); and further receives and stores each Client 12 capabilities and preferences (C/P) (col. 3, lines 5-25 and col. 4, lines 9-14); and selectively encodes at least one of different qualities, MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31) of the received broadcast of at least the audio and video for storage on Storage Media, such as a disk to enable a Client to access and retrieve the media data based on the Client C/P (col. 6, lines 12-49), note that the user can request

for audio, video, image, multimedia or media "audio and video" and the client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server, processes and delivered accordingly based on the selected preferences/specifications.

Sahai fails to explicitly teach where the selected qualities are based on semantic content of at least one of audio and video.

However, note the **Vetro** reference figures 1-3, discloses multimedia delivering a compressed bitstream through a network to a user device, where a Manager selects a particular one of a plurality of conversion modes depending on semantic content of the bitstream and network characteristics, using different rating to transcode the bitstream with respect to words, sounds, image objects, scenes, etc., (col.4, lines 15-65, col.5, line 20-col.6, line 6 and line 38-col.7, line 10).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Vetro into the system of Sahai in order to dynamically enhanced the video quality or rate with dynamic scene changes and provide the user with the best delivery of scene changes or semantic content of the video or bitstream based on user preferences.

Sahai as modified by Vetro fail to explicitly teach where the semantic content comprises at least one of actors, stars, director and rating.

However, Examiner takes OFFICIAL NOTICE that actors, stars, etc., are well know features in video streaming or television. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Sahai

as modified by Vetro to include actors, stars, etc., for the advantage of enhancing the audio/video with favorite actors, stars, etc., that meets a user's desire or preferences

Claim 22 is met as previously discussed with respect to claim 5.

Claim 23 is met as previously discussed with respect to claim 7.

Claim 24 is met as previously discussed with respect to claim 8.

Claim 25 is met as previously discussed with respect to claim 9.

Claim 27 is met as previously discussed with respect to claim 16.

As to claim 28, Sahai further discloses automatically selecting either the first quality, and the second quality based upon user preferences (col.4, lines 9-27, col.5, lines 4-6, col.6, lines 12-49 and line 57-col.7, line 36).

As to claim 29, Sahai further discloses automatically selecting either the first quality and the second quality, based at least audio and video upon (col.4, lines 9-27, col.5, lines 4-6, col.6, lines 12-49 and line 57-col.7, line 36).

As to claim 38, the claimed method is composed of the same structural elements that were discussed in the rejection of claim 2; the claimed "providing a storage attribute of the preferences description..." is met by Storage Media or Disk of Server 10 (col. 6, lines 50-52) which stores Client C/P, and where Server 10 encodes the audio and video based upon the content of at least one of audio and video.

As to claims 39-42, Sahai as modified by Vetro further discloses selecting either the first quality and the second quality based upon the type of content, audio, video clip, video, audio/video, etc., (multimedia streaming) and uses various formats (MPEG1, MPEG2, etc.,) for encoding based on the content and transport mechanism, where the

Art Unit: 2623

Server dynamically adjusts the bit rate before delivering the asset to the client (col. 5, lines 35-46, col. 6, lines 12-49 and line 57-col.7, line 36), but silent to selecting a third quality of encoding and selecting encoding a specific type of content, such as sports programming, nature programming, etc.,

However, it would have been obvious to one of ordinary skilled artisan to modified the system of Sahai as modified by Vetro select from any number of encoding qualities to meet the capabilities/preferences of the client device and furthermore to provide the client with additional selection preferences of encoding type for any type or specific type of content upon a user request meets the user's desired.

Claim 43 is met as previously discussed with respect to claim 14.

Claim 44 is met as previously discussed with respect to claim 17.

Claim 45 is met as previously discussed with respect to claim 18.

Claim 46 is met as previously discussed with respect to claim 19.

Claim 48 is met as previously discussed with respect to claim 8.

As to claim 49, the claimed method is composed of the same structural elements that were discussed in the rejection of claim 2; the claimed "providing a storage attribute of the preferences description..." is met by Storage Media or Disk of Server 10 (col. 6, lines 50-52) which stores Client C/P, and where Server 10 encodes the audio and video based upon the combination of at least capabilities and the preferences description (col. 6, lines 12-49).

Claims 50-51 are met as previously discussed with respect to claims 39-40.

Claim 52 is met as previously discussed with respect to claim 29.

Claim 53 is met as previously discussed with respect to claim 18.

Claim 54 is met as previously discussed with respect to claim 19.

Claim 56 is met as previously discussed with respect to claim 8.

Claim 104 is met as previously discussed with respect to claim 2.

8. Claims 20, 30, 47, 55, 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)** and further in view of **Tracton et al (6,470,378)**.

As to claim 20, Sahai as modified by Vetro, teach all the claimed limitations as previously discussed with respect to claim 2 above, but fail to explicitly teach selecting the first quality and second quality, based upon prior selections of the first quality.

However, **Tracton** reference figures 1-3, discloses dynamic content customization in a client/server environment where selected qualities are based upon prior selection of qualities (col.5, line 30-col.6, line 7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Tracton into the system of Sahai to stored history or profile of previously selections of devices in order to speed-up data processing at the server.

As to claim 30, Sahai as modified by Vetro, teaches all the claimed limitations as previously discussed with respect to claim 22 above, but fail to explicitly teach selecting the first quality and second quality, based upon prior selections of the first quality, which is met as previously discussed with respect to claim 20.

As to claim 47, Sahai as modified by Vetro, teaches all the claimed limitations as previously discussed with respect to claim 39 above, but fail to explicitly teach selecting the first quality and second quality, based upon prior selections of the first quality, which is met as previously discussed with respect to claim 20.

As to claim 55, Sahai as modified by Vetro, teaches all the claimed limitations as previously discussed with respect to claim 50 above, but fail to explicitly teach selecting the first quality and second quality, based upon prior selections of the first quality, which is met as previously discussed with respect to claim 20.

As to claims 57-60, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate

Art Unit: 2623

of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31);

Server 10, stores each Client 12 capabilities and preferences and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media "audio and video" and the client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server, processes and delivered accordingly based on the selected preferences/specifications.

Sahai fails to explicitly teach where the selected qualities based upon prior selection of qualities

However, **Tracton** reference figures 1-3, discloses dynamic content customization in a client/server environment where selected qualities are based upon prior selection of qualities (col.5, line 30-col.6, line 7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Tracton into the system of Sahai to stored history or profile of previously selection of devices in order to speed-up data processing at the server.

9. Claims 94-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Osawa et al (5,956,037)**.

As to claims 94-103, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31);

Server 10, stores each Client 12 capabilities and preferences and provides the media attribute of the preferences description describing the quality of encoding, such

Art Unit: 2623

as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media "audio and video" and the client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server, processes and delivered accordingly based on the selected preferences/specifications.

Sahai fails to explicitly teach where the selected qualities are based on VCR-like functions, such as: pausing, fast-forwarding, reversing or rewinding, skipping, etc., of the content of at least one of audio and video.

However, **Osawa** discloses in figures 1-3, a video information providing/receiving system where the providing unit (Host 208) includes video information editing unit (211), which edits video based on extracted operation history information of User Terminal (UT) 200, which includes various VCR-like functions and further teaches using previous operation history to playback other video (col.2, lines 43-52, col.3, line 62-col.4, line 24, line 37-col.5, line 19 and col.7, line 26-col.8, line 1+ and col.11, lines 27-63).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Osawa into the system of Sahai to edit the video and audio information based on operation history or VCR-like functions of the user, thereby when a user edits/processes received video information with his or her video recoding unit, he or she should perform the required operations while seeing the display.

10. Claims 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)** as applied to claims 5 and 22, above and further in view of **Osawa et al (5,956,037)**.

As to claims 10 and 26, Sahai as modified by Vetro, fail to explicitly teach where the selected qualities are based on VCR-like functions, such as: pausing, fast-forwarding, reversing or rewinding, skipping, etc., of the content of at least one of audio and video.

However, **Osawa** discloses in figures 1-3, a video information providing/receiving system where the providing unit (Host 208) includes video information editing unit (211), which edits video based on extracted operation history information of User Terminal (UT) 200, which includes various VCR-like functions and further teaches using previous operation history to playback other video (col.2, lines 43-52, col.3, line 62-col.4, line 24, line 37-col.5, line 19 and col.7, line 26-col.8, line 1+ and col.11, lines 27-63).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Osawa into the system of Sahai as modified by Vetro to edit the video and audio information based on operation history or VCR-like functions of the user, thereby when a user edits/processes received video information with his or her video recoding unit, he or she should perform the required operations while seeing the display.

11. Claims 31-37, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Osawa et al (5,956,037)**, and further in view of **Vetro et al (6,542,546)**.

As to claims 31-37, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31);

Server 10, stores each Client 12 capabilities and preferences and provides the media attribute of the preferences description describing the quality of encoding, such

as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media “audio and video” and the client capabilities, media delivery properties or preferences/specifications as chosen by the user are also shipped across the server, processes and delivered accordingly based on the selected preferences/specifications.

Sahai fails to explicitly teach where the selected qualities are based on VCR-like functions, such as: pausing, fast-forwarding, reversing or rewinding, skipping, etc., of the content of at least one of audio and video.

However, **Osawa** discloses in figures 1-3, a video information providing/receiving system where the providing unit (Host 208) includes video information editing unit (211), which edits video based on extracted operation history information of User Terminal (UT) 200, which includes various VCR-like functions (col.2, lines 43-52; col.3, line 62-col.4, line 24, line 37-col.5, line 19 and col.7, line 26-col.8, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Osawa into the system of Sahai to edit the video and audio information based on operation history or VCR-like functions of the user, thereby when a user edits/processes received video information with his or her video recoding unit, he or she should perform the required operations while seeing the display.

Sahai as modified by Osawa fail to explicitly teach where the selected qualities are based on semantic content of at least one of audio and video, and where each of

the first and second qualities is respectively associated with at least one type of semantic content of at least one of the audio, image and video.

However, note the **Vetro** reference figures 1-3, discloses multimedia delivering a compressed bitstream through a network to a user device, where a Content-network Device (CND) Manager selects a particular one of a plurality of conversion modes depending on semantic content of the bitstream and network characteristics, using different rating to transcode the bitstream with respect to words, sounds, image objects, scenes, etc., (col.4, lines 15-65, col.5, line 20-col.6, line 6 and line 38-col.7, line 10).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Vetro into the system of Sahai as modified by Osawa in order to dynamically enhanced the respective segments of the video with different qualities or rate with dynamic scene changes and associated each change with a type of semantic content to provide the user with the best delivery of scene changes or semantic content of the video or bitstream based on user preferences.

12. Claims 89-93, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sahai et al (6,594,699)** in view of **Vetro et al (6,542,546)**, and further in view of **O'Brien et al (6,055,569)**.

As to claims 89-93, note the **Sahai et al** reference figures 1-3, disclose system for capability based multimedia streaming over a network and further disclose method of

using a system with at least one of an audio, an image, and a video comprising a plurality of frames comprising the following:

the claimed "providing a preferences description, describing preferences of a user with respect to the use of said at least one of audio, image..." is met by Client 12 (fig. 1, col. 2, lines 44-64), note that when a user wants to playback any video/multimedia asset, the request is shipped across to Server 10 via a communication Network 14, where the shipping of the requested media data, includes Client 12 capabilities (includes hardware type, example TV Set Top, PC, Lap Top, etc.,) and preferences (C/P) with respect to the audio, image and video, which are stored in Server 10 for a particular session or for predetermined time period in a static configuration approach (col. 3, lines 5-25 and col. 4, lines 9-14), note further that the preference description includes multiple attributes, such as, playback frame rate, bit rate of the audio and video data to use, the size of the displayed frame, media formats, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., (col. 3, lines 23-60 and col. 4, lines 9-31);

Server 10, stores each Client 12 capabilities and preferences and provides the media attribute of the preferences description describing the quality of encoding, such as MPEG1, MPEG2, MJPEG, G723 audio, GSM audio, etc., of the audio, image and video before delivering the requested media data (col. 3, lines 23-60 and col. 4, lines 9-31), note that the user can request for audio, video, image, multimedia or media "audio and video" and the client capabilities, media delivery properties or

preferences/specifications as chosen by the user are also shipped across the server, processes and delivered accordingly based on the selected preferences/specifications.

Sahai fails to explicitly teach where the selected qualities are based on semantic content of at least one of audio and video.

However, note the **Vetro** reference figures 1-3, discloses multimedia delivering a compressed bitstream through a network to a user device, where a Content-network Device (CND) Manager selects a particular one of a plurality of conversion modes depending on semantic content of the bitstream and network characteristics, using different rating to transcode the bitstream with respect to words, sounds, image objects, scenes, etc., (col.4, lines 15-65, col.5, line 20-col.6, line 6 and line 38-col.7, line 10).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Vetro into the system of Sahai in order to dynamically enhanced the video quality or rate with dynamic scene changes and provide the user with the best delivery of scene changes or semantic content of the video or bitstream based on user preferences.

Sahai as modified by Vetro, fail to explicitly teach determining the number of layers of supplemental data auxiliary to the at least one of the audio and video based at least in part upon the content attribute and the type attribute.

However, **O'Brien** discloses in figures 1-3, accelerating web access by predicting a user action which determines which pages to download based of a probability weight to provide a layer attribute of the preferences description indicating the number of layers of supplemental data to download (col.3, line 29-col.4, line 29 and line 52-col.5, line 8)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of O'Brien into the system of Sahai as modified by Vetro in order to determine in advance the number links or web pages and set limits on the number of links or web pages that would be needed to reduce the size of data file to be retrieve to free up network bandwidth and further increase the data retrieval speed at the server and also client terminal.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

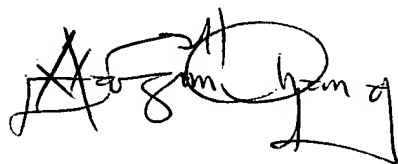
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

Art Unit: 2623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.

A handwritten signature in black ink, appearing to read 'Annan Q. Shang', with a stylized flourish at the end.

Annan Q. Shang